

REMARKS

Applicant thanks the Examiner for the very thorough consideration given the present application.

Claims 1, 2, 5, 6, 9, 10 and 13-16 are now present in this application. Claims 1, 13 and 16 are independent. By this amendment, claims 1 and 10 are amended, claims 3, 4, 7, 8, 11 and 12 are canceled without prejudice, and claim 13-16 are added. No new matter is involved. The amendment to claim 1 that changes "rotor" to --stator-- is supported by Fig. 4 and paragraph [0037] in the specification.

Reconsideration of this application, as amended, is respectfully requested.

Priority Under 35 U.S.C § 119

Applicant thanks the Examiner for acknowledging Applicant's claim for foreign priority under 35 U.S.C. § 119, and receipt of the certified priority documents.

Information Disclosure Citation

Applicant thanks the Examiner for considering the references supplied with the Information Disclosure Statement filed September 16, 2004, and for providing Applicant with an initialed copy of the PTO-1449 form filed therewith.

Rejection under 35 U.S.C. § 103

Claims 1-4 and 9-12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over either U.S. Patent 3,217,193 to Rayner or JP 10-210727 ("JP '727"). This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

Initially, Applicant respectfully submits that this rejection is moot with respect to claims 3, 4, 11 and 12, which have been canceled.

Because the rejection is based on 35 U.S.C. §103, what is in issue in such a rejection is "the invention as a whole, "not just a few features of the claimed invention. Under 35 U.S.C. §103, " [a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." The determination under §103 is whether the claimed invention as a whole would have been obvious to a person of ordinary skill in the art at the time the invention was made. See In re O' Farrell, 853 F.2d 894, 902, 7 USPQ2d 1673, 1680 (Fed. Cir. 1988). In determining obviousness, the invention must be considered as a whole and the

claims must be considered in their entirety. See Medtronic, Inc. v. Cardiac Pacemakers, Inc., 721 F.2d 1563, 1567, 220 USPQ 97, 101 (Fed. Cir. 1983).

In rejecting claims under 35 U.S.C. §103, it is incumbent on the Examiner to establish a factual basis to support the legal conclusion of obviousness. See, In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one of ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. F-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v Delta Resins & Refactories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note, In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of

the modification. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783 84 (Fed. Cir. 1992). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be suggested or taught by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1970). All words in a claim must be considered in judging the patentability of that claim against the prior art. In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

A suggestion, teaching, or motivation to combine the prior art references is an "essential evidentiary component of an obviousness holding." C.R. Bard, Inc. v. M3 Sys. Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998). This showing must be clear and particular, and broad conclusory statements about the teaching of multiple references, standing alone, are not "evidence." See In re Dembiczak, 175 F.3d 994 at 1000, 50 USPQ2d 1614 at 1617 (Fed. Cir. 1999).

Moreover, it is well settled that the Office must provide objective evidence of the basis used in a prior art rejection. A factual inquiry whether to modify a reference must be based on objective evidence of record, not merely conclusory statements of the Examiner. See, In re Lee, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002).

Furthermore, during patent examination, the PTO bears the initial burden of presenting a *prima facie* case of unpatentability. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785788 (Fed. Cir. 1984). If the PTO fails to meet

this burden, then the Applicant is entitled to the patent. Only when a prima facie case is made, the burden shifts to the applicant to come forward to rebut such a case.

Applicant respectfully submits that this rejection is improper for a number of reasons.

Rayner is directed to a water cooled motor, which does not have holes or blades located in a portion of a rotor housing adjacent to the stator, as recited. Instead, Rayner has a separate diffuser plate 53 with cup-shaped indentations to receive injected water, in Fig. 1, or has a rotating deflector 56 with openings 57, 58 and vanes or baffles 63 to disperse injected liquid. Thus, Rayner is significantly different than what is claimed and, in no way, discloses or suggests the claimed invention.

JP 10-210727 appears to disclose cooling an outer rotor motor using holes and riser tabs 12 in yoke 11 that serve as blades of a fan.

However, JP '727 neither discloses nor suggests curved blades, as recited in amended claim 1, from which claims 2, 9 and 10 depend. Accordingly, the Office Action fails to make out a prima facie case of obviousness of the subject matter recited in currently pending claims 1, 2, 9 and 10.

Regarding claims 2, 9 and 10, the Office Action concludes that to have the blade bent downwardly or upwardly is of little patentable significance because, regardless of their orientation, the motor would still be cooled.

Applicant respectfully submits that what is in issue is the claimed invention, and the Office has the burden of providing objective factual evidence that what is claimed is obvious over the applied art. All the Office Action presents in support of this aspect of the rejection is a bald, unsupported speculative conclusion and it is well settled that a rejection may not be properly based on speculation such as this. It is well settled that a rejection under 35 U.S.C. §103 cannot properly be based on speculation but must be based on objective factual evidence of record. See, In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968). See, also, In re GPAC Inc., 35 USPQ2d 1116 at 1123 (Fed. Cir. 1995) and Ex parte Haymond, 41 USPQ2d 1217 at 1220 (Bd. Pat. App. & Int. 1996).

Moreover, the rationale that "this is merely a rearrangement of parts (MPEP 2144.04)" is completely improper in a rejection based on 35 USC § 103.

Mere citation of catchphrases such as "this is merely a rearrangement of parts" or of particular case law decisions, or a section of the Manual of Patent Examining Procedure (MPEP) as a basis for rejecting claims under 35 USC § 103 is improper, as it sidesteps the fact-intensive inquiry mandated by section 103. In other words, there are not "merely a rearrangement of parts" obviousness rejections or merely "MPEP 2144.04" obviousness rejections, but rather only section 103 obviousness rejections. This method of analysis is founded on legal error because it substitutes supposed *per se* rules for the

particularized inquiry required by section 103, and necessarily produces erroneous results.

As stated in In re Ochiai, 71 F.3d 1565, 1572, 37 USPQ2d 1127, 1133 (Fed. Cir. 1995), the use of *per se* rules, while undoubtedly less laborious than a searching comparison of the claimed invention -- including all its limitations -- with the teachings of the prior art, flouts section 103 and the fundamental case law applying it. *Per se* rules that eliminate the need for fact-specific analysis of claims and prior art may be administratively convenient for PTO examiners and the Board. But reliance on *per se* rules of obviousness is legally incorrect and must cease. Any such administrative convenience is simply inconsistent with section 103, which, according to *Graham* and its progeny, entitles an applicant to issuance of an otherwise proper patent unless the PTO establishes that the invention *as claimed* in the application is obvious over cited prior art, based on the specific comparison of that prior art with claim limitations. The court held that its precedents do not establish any *per se* rules of obviousness.

A factual inquiry whether to modify a reference must be based on objective evidence of record, not merely conclusory statements of the Examiner. See, In re Lee, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002).

Accordingly, reconsideration and withdrawal of this rejection of claims 1-4 and 9-12 are respectfully requested.

Claims 5-8 stand rejected under 35 USC §103(a) as unpatentable over the prior art applied in the rejection of claim 1, and further in view of EP 0445 100 (“EPO ‘100”). This rejection is respectfully traversed.

Initially, this rejection is moot with respect to claims 7 and 8, which have been canceled.

Moreover, the Office Action fails to provide objective factual evidence of proper motivation, i.e., for one of ordinary skill in the art to turn to EPO ‘100 to modify either applied art reference combination applied in the rejection of claim 1.

The curved blade feature of claims 5 and 6 is not rendered obvious by either reference combination used to reject claim 1, for reasons stated above. Accordingly, even if it were obvious (which has not been shown to be the case) to modify the base reference combinations in view of EPO ‘100 to provide grooves to the riser tabs of that art, the modified version of the applied art would still not have the claimed curved feature and, therefore, the invention recited in claims 5 and 6 would not be rendered obvious by the proposed combination of references.

Furthermore, the Office Action has not made out a *prima facie* case that it would be obvious to provide the improper reference combinations used to reject claim 1 with grooves, as recited, based on EPO ‘100.

EPO ‘100 is an atomizing turbine for an agricultural pest sprayer using a squirrel cage fan with flat or curved vanes. The Office Action fails to provide

objective factual evidence that one of ordinary skill in the electric outer rotor motor art would be properly motivated to look to the art of atomization of ecological sprays, e.g., insecticides, fungicides, etc. (col. 1, lines 1-20) to modify the cooling apparatus of electric outer rotor motors. EPO '100 is not even directed to solving the same problem as is the art it is applied to. In this regard, EPO '100 is not applied to cooling electric motors with a rotor casing, for example, but is directed to atomizing ecological liquids into air to be sprayed on ecological products.

Accordingly, the Office Action fails to make out a prima facie case of proper motivation to modify the art applied in the rejection of claim 1 in view of EPO '100, as suggested, or to otherwise make out a prima facie case of obviousness of the claimed invention.

Reconsideration and withdrawal of this rejection of claims 5-8 are respectfully requested.

New Claims 13-16

Applicant has added new claims 13-16, which are directed to a structure for cooling a motor of a washing machine having a combination of features including a rotor housing having a plurality of blades, each provided on one side of the hole and containing a plurality of grooves as the blade extends away from the surface of the rotor housing. None of the applied art discloses or

suggests such a device, and this claim appears to patentably define over the applied art.

New claim 16 recites a combination of features including a plurality of blades, each provided on one side of the hole for being opposite to a dehydration direction to a central point of the rotor housing in order to maximize the amount of cold air flowing into the inside of the rotor housing through the plurality of holes when the washing machine operates in a dehydration mode. Support for this features is found, for example in original claim 9 and paragraph [0046], for example.

Applicant respectfully submits that claim 16 patentably defines over the applied art. In addition to the improper nature of the proposed reference combination of Rayner and JP '727, for reasons noted above, Applicant respectfully submits that the proposed reference combination teaches away from achieving the claimed invention. In this regard, in paragraph [0010], JP '727 discloses that its preferred rotation direction is like that of the prior art disclosed in Applicant's Figs. 2 and 3, i.e., where the blade rotates ahead of the slot, and rotation in the reverse direction, although achieving a "wind of considerable extent," does not result in maximizing the amount of cold air flowing into the inside of the rotor housing, as does the preferred direction of rotation. Perhaps this is due to the shape of the slot, which is not rectangular in JP '727. Applicant is not sure of the cause of this, but paragraph [0010] of JP '727 indicates that, when the rotor is rotated backward in JP '727, the

cooled air directed into the motor is less than when the rotor is rotated with the blade leading the slot – which is the opposite of providing the maximum cold air to the motor that is positively recited in claim 16.

Additional Cited References

Because the remaining references cited by the Examiner have not been utilized to reject the claims, but have merely been cited to show the state of the art, no comment need be made with respect thereto.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Robert J. Webster, Registration No. 46,472, at (703) 205-8076, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

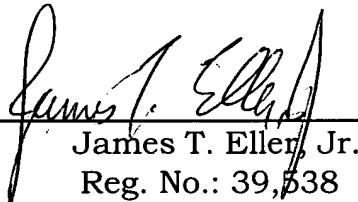
If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

BIRCH STEWART, KOLASCH & BIRCH, LLP

By:



James T. Eller, Jr.
Reg. No.: 39,538

JTE/RJW/mmi:eb
RW

P.O. Box 747
Falls Church, Virginia 22040-0747
Telephone: (703)205-8000